

Photovoltaic solar power in solutions for energy and the environment

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Abstract: With more than 1 TW of installed capacity and nearly 5% of global electricity production currently, photovoltaic energy is entering its maturity stage. The presentation will first provide a brief reminder of the history of the development of solar energy, with the aim of giving its characteristics, its operating principle, the state of the technological art and industrial developments.

We will then address the major challenges of the sector to contribute to social and economic transformations and solutions in the ongoing environmental transition, before discussing some perspectives of scientific research.

We will try to answer several questions:

What about the environmentally virtuous nature of solar energy? Is it an energy likely to contribute significantly to the energy transition, despite its uncontrollable nature? What technical developments can be expected?

And also: what about the chemistry in all this?